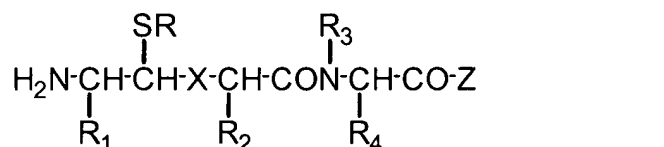


## ATTACHMENT B

### Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Original) A compound of general formula I :



wherein :

- R<sub>1</sub> denotes an alkyl, alkenyl or alkynyl chain, or a cycloalkyl or (cycloalkyl)alkyl group substituted by at least one
  - -COOH group, optionally esterified by an alkyl group comprising 2 to 12 carbon atoms,
  - SO<sub>3</sub>H group, optionally protected by a penty group,
  - PO<sub>3</sub>H<sub>2</sub> group, optionally substituted by a (-CH<sub>2</sub>CH<sub>2</sub>SCOR<sub>5</sub>) group, with R<sub>5</sub> representing a C<sub>1</sub>-C<sub>4</sub> alkyl group, a phenyl or benzyl group, or
  - tetrazolyl group.
- R<sub>2</sub> denotes an alkyl chain, or an aryl, arylalkyl, cycloalkyl, (cycloalkyl)alkyl, (heteroaryl)alkyl group which may or may not be substituted by at least one OH, OR, SR', NH<sub>2</sub>, NHR', guanidiny, COOH or CONH<sub>2</sub> group, or a halogen atom selected from among F, Cl, Br or I with R' representing a straight-chain or branched C<sub>1-4</sub> alkyl group.
- R<sub>3</sub> denotes a hydrogen atom or a methyl group,
- R<sub>4</sub> denotes
  - an alkyl chain, an aryl, arylalkyl, cycloalkyl, (cycloalkyl)alkyl, (heteroaryl)alkyl, heterocycloalkyl or (heterocycloalkyl)alkyl group substituted by at least one CONH<sub>2</sub>, SO<sub>3</sub>H, SO<sub>2</sub>NH<sub>2</sub>, PO<sub>3</sub>H<sub>2</sub> or tetrazolyl group, with the groups SO<sub>3</sub>H and PO<sub>3</sub>H<sub>2</sub> optionally protected,

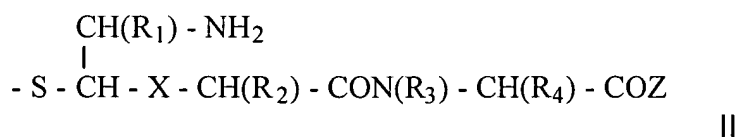
– a C<sub>2-6</sub> alkyl chain, an aryl, arylalkyl, cycloalkyl, (cycloalkyl)alkyl, (heteroaryl)alkyl, heterocycloalkyl or (heterocycloalkyl)alkyl group substituted by at least one CO<sub>2</sub>H group optionally protected, or

- R<sub>3</sub> and R<sub>4</sub> may together constitute a 5- or 6-membered heterocyclic compound, substituted by at least one CO<sub>2</sub>H, CONH<sub>2</sub>, SO<sub>3</sub>H, SO<sub>2</sub>NH<sub>2</sub> or PO<sub>3</sub>H<sub>2</sub> group with the groups CO<sub>2</sub>H, SO<sub>3</sub>H and PO<sub>3</sub>H<sub>2</sub> optionally protected,

- X denotes a group CONH or CH<sub>2</sub>NH,

- Z denotes a group OH, OCH<sub>2</sub>-C<sub>6</sub>H<sub>5</sub> or NR''R''' wherein R'' and R''' independently of one another may denote a hydrogen atom or an alkyl, aryl or arylalkyl group, where R'' and R''' may constitute, together with the nitrogen atom, a 5- or 6-membered heterocycle possibly having a second heteroatom selected from among O, S and N, and

- R denotes a hydrogen atom or a group of formula II



corresponding to the symmetric disulphide of the inhibitor wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, X and Z are as hereinbefore defined, and the derivatives thereof.

2. (Original) The compound according to claim 1, wherein :

- R<sub>4</sub> denotes an alkyl chain, an aryl, arylalkyl, cycloalkyl, (cycloalkyl)alkyl, (heteroaryl)alkyl, heterocycloalkyl or (heterocycloalkyl)alkyl group substituted by at least one CONH<sub>2</sub>, SO<sub>3</sub>H, SO<sub>2</sub>NH<sub>2</sub>, PO<sub>3</sub>H<sub>2</sub> or tetrazolyl group, with the groups SO<sub>3</sub>H and PO<sub>3</sub>H<sub>2</sub> optionally being protected as described above, or

- R<sub>4</sub> constitutes with R<sub>3</sub> a 5- or 6-membered heterocyclic compound, substituted by at least one CO<sub>2</sub>H, CONH<sub>2</sub>, SO<sub>3</sub>H, SO<sub>2</sub>NH<sub>2</sub> or PO<sub>3</sub>H<sub>2</sub> group with the groups CO<sub>2</sub>H, SO<sub>3</sub>H and PO<sub>3</sub>H<sub>2</sub> optionally being protected.

3. (Original) The compound according to claim 1, wherein R<sub>4</sub> and R<sub>3</sub> together constitute a 5- or 6-membered, heterocyclic compound substituted by at least

one group CO<sub>2</sub>H, CONH<sub>2</sub>, SO<sub>3</sub>H, SO<sub>2</sub>NH<sub>2</sub> or PO<sub>3</sub>H<sub>2</sub> with the groups CO<sub>2</sub>H, SO<sub>3</sub>H and PO<sub>3</sub>H<sub>2</sub> optionally being protected.

4. (Original) The compound according to claim 1, wherein X denotes a CONH function.

5. (Original) The compound according to claim 1, wherein R<sub>2</sub> denotes an optionally substituted alkyl or arylalkyl chain.

6. (Original) The compound according to claim 1, which is selected from the group consisting in :

N-[(2S,3R)- and (2R,3R)-3-amino-2-mercapto-5-sulphonate] pentanoyl]-L.Tyr-L.Sal-OH ;

N-[(2S,3R)- and (2R,3R)-3-amino-2-mercapto-5-sulphonate] pentanoyl]-L.Tyr-L.hSal-OH ;

N-[(2S,3R)- and (2R,3R)-3-amino-5-carboxy-2-mercapto] pentanoyl]-L.Ile-L.(3R)(3-COOH)Pro-OH ;

N-[(2S,3R)- and (2R,3R)-3-amino-5-phosphonate-2-mercapto] pentanoyl]-L.Ile-L.Glu-OH ;

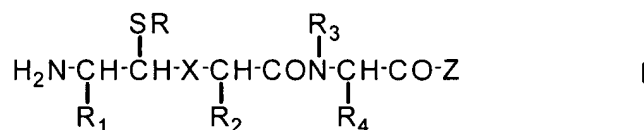
the N-[(2S,3R) and (2R,3R), 3-amino-2-mercapto-5-sulphonate] pentanoyl]-L.Ile-L.Sal-OH ;

N-[(2S,3R)- and (2R,3R)-3-amino-2-mercapto-5-sulphonate] pentanoyl]-L.Ile-L.(3R)(3-COOH)Pro-OH ;

N-[(2S,3R)- and (2R,3R)-3-amino-2-mercapto-5-sulphonate] pentanoyl]-L.Ile-L.(3S)(3-COOH)Pro-OH ; and

N-[(2S,3R)- and (2R,3R)-3-amino-2-mercapto-5-sulphonate] pentanoyl]-L.Ile-L.Glu-NH<sub>2</sub>.

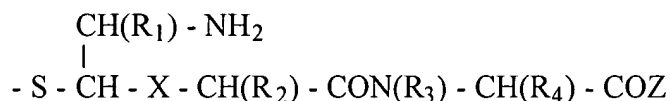
7. (Withdrawn) A process for preparing a compound of general formula I



wherein

- R<sub>1</sub> denotes an alkyl, alkenyl or alkynyl chain, or a cycloalkyl or (cycloalkyl)alkyl group substituted by at least one
  - -COOH group, optionally esterified by an alkyl group comprising 2 to 12 carbon atoms,
  - SO<sub>3</sub>H group, optionally protected by a pentyl group,
  - PO<sub>3</sub>H<sub>2</sub> group, optionally substituted by a (-CH<sub>2</sub>CH<sub>2</sub>SCOR<sub>5</sub>) group, with R<sub>5</sub> representing a C<sub>1</sub>-C<sub>4</sub> alkyl group, a phenyl or benzyl group, or
  - tetrazolyl group.
- R<sub>2</sub> denotes an alkyl chain, or an aryl, arylalkyl, cycloalkyl, (cycloalkyl)alkyl, (heteroaryl)alkyl group which may or may not be substituted by at least one OH, OR, SR', NH<sub>2</sub>, NHR', guanidiny, COOH or CONH<sub>2</sub> group, or a halogen atom selected from among F, Cl, Br or I with R' representing a straight-chain or branched C<sub>1-4</sub> alkyl group.
- R<sub>3</sub> denotes a hydrogen atom or a methyl group,
- R<sub>4</sub> denotes
  - an alkyl chain, an aryl, arylalkyl, cycloalkyl, (cycloalkyl)alkyl, (heteroaryl)alkyl, heterocycloalkyl or (heterocycloalkyl)alkyl group substituted by at least one CONH<sub>2</sub>, SO<sub>3</sub>H, SO<sub>2</sub>NH<sub>2</sub>, PO<sub>3</sub>H<sub>2</sub> or tetrazolyl group, with the groups SO<sub>3</sub>H and PO<sub>3</sub>H<sub>2</sub> optionally protected,
  - a C<sub>2-6</sub> alkyl chain, an aryl, arylalkyl, cycloalkyl, (cycloalkyl)alkyl, (heteroaryl)alkyl, heterocycloalkyl or (heterocycloalkyl)alkyl group substituted by at least one CO<sub>2</sub>H group optionally protected, or
- R<sub>3</sub> and R<sub>4</sub> may together constitute a 5- or 6-membered heterocyclic compound, substituted by at least one CO<sub>2</sub>H, CONH<sub>2</sub>, SO<sub>3</sub>H, SO<sub>2</sub>NH<sub>2</sub> or PO<sub>3</sub>H<sub>2</sub> group with the groups CO<sub>2</sub>H, SO<sub>3</sub>H and PO<sub>3</sub>H<sub>2</sub> optionally protected,

- X denotes a group CONH,
- Z denotes a group OH, OCH<sub>2</sub>-C<sub>6</sub>H<sub>5</sub> or NR''R''' wherein R'' and R''' independently of one another may denote a hydrogen atom or an alkyl, aryl or arylalkyl group, where R'' and R''' may constitute, together with the nitrogen atom, a 5- or 6-membered heterocycle possibly having a second heteroatom selected from among O, S and N, and
- R denotes a hydrogen atom or a group of formula II



II

corresponding to the symmetric disulphide of the inhibitor wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, X and Z are as hereinbefore defined,

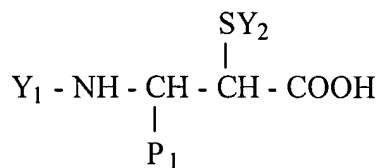
which involves at least coupling an ester dipeptide of general formula III



wherein

- P<sub>2</sub> and P<sub>4</sub> correspond to protected forms of R<sub>2</sub> and R<sub>4</sub>,
- Z' denotes an OC(CH<sub>3</sub>)<sub>3</sub>, OCH<sub>2</sub>-C<sub>6</sub>H<sub>5</sub> or NR''R''' group wherein R'' and R''' independently of one another may denote a hydrogen atom or an alkyl, aryl or arylalkyl group, while R'' and R''' may constitute, together with the nitrogen atom, a 5- or 6-membered heterocycle possibly having a second heteroatom selected from among O, S and N,

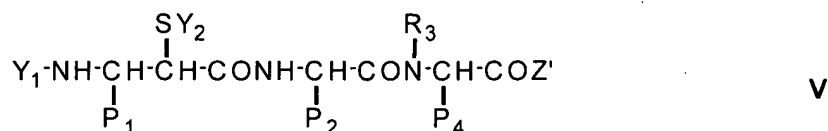
with a compound of general formula IV



IV

wherein :

- Y<sub>1</sub> denotes a protecting group
  - Y<sub>2</sub> denotes a protecting group and
  - P<sub>1</sub> denotes a protected form of R<sub>1</sub>,
- under conditions suitable to produce compound V

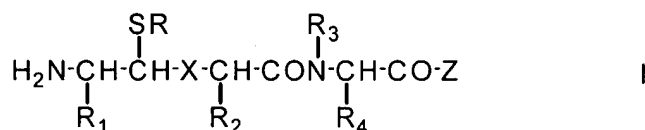


and deprotecting it for obtaining said compound of general formula I.

8. (Withdrawn) The process according to claim 7, wherein the coupling reaction is carried out in an organic solvent in the presence of a coupling agent and a tertiary amine and at a temperature of the order of 20°C.

9. (Withdrawn) A process according to claim 7, wherein the two asymmetric carbons of the dipeptide ester of general formula III have an S configuration.

10. (Withdrawn) A process for preparing a compound of general formula I

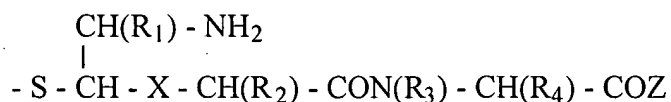


wherein :

- R<sub>1</sub> denotes an alkyl, alkenyl or alkynyl chain, or a cycloalkyl or (cycloalkyl)alkyl group substituted by at least one
  - -COOH group, optionally esterified by an alkyl group comprising 2 to 12 carbon atoms,
  - SO<sub>3</sub>H group, optionally protected by a pentyl group,

- PO<sub>3</sub>H<sub>2</sub> group, optionally substituted by a (-CH<sub>2</sub>CH<sub>2</sub>SCOR<sub>5</sub>) group, with R<sub>5</sub> representing a C<sub>1</sub>-C<sub>4</sub> alkyl group, a phenyl or benzyl group, or
- tetrazolyl group.
- R<sub>2</sub> denotes an alkyl chain, or an aryl, arylalkyl, cycloalkyl, (cycloalkyl)alkyl, (heteroaryl)alkyl group which may or may not be substituted by at least one OH, OR, SR', NH<sub>2</sub>, NHR', guanidiny, COOH or CONH<sub>2</sub> group, or a halogen atom selected from among F, Cl, Br or I with R' representing a straight-chain or branched C<sub>1-4</sub> alkyl group.
- R<sub>3</sub> denotes a hydrogen atom or a methyl group,
- R<sub>4</sub> denotes
  - an alkyl chain, an aryl, arylalkyl, cycloalkyl, (cycloalkyl)alkyl, (heteroaryl)alkyl, heterocycloalkyl or (heterocycloalkyl)alkyl group substituted by at least one CONH<sub>2</sub>, SO<sub>3</sub>H, SO<sub>2</sub>NH<sub>2</sub>, PO<sub>3</sub>H<sub>2</sub> or tetrazolyl group, with the groups SO<sub>3</sub>H and PO<sub>3</sub>H<sub>2</sub> optionally protected,
  - a C<sub>2-6</sub> alkyl chain, an aryl, arylalkyl, cycloalkyl, (cycloalkyl)alkyl, (heteroaryl)alkyl, heterocycloalkyl or (heterocycloalkyl)alkyl group substituted by at least one CO<sub>2</sub>H group optionally protected, or
  - R<sub>3</sub> and R<sub>4</sub> may together constitute a 5- or 6-membered heterocyclic compound, substituted by at least one CO<sub>2</sub>H, CONH<sub>2</sub>, SO<sub>3</sub>H, SO<sub>2</sub>NH<sub>2</sub> or PO<sub>3</sub>H<sub>2</sub> group with the groups CO<sub>2</sub>H, SO<sub>3</sub>H and PO<sub>3</sub>H<sub>2</sub> optionally protected,
  - X denotes a CH<sub>2</sub>-NH group,
  - Z denotes a group OH, OCH<sub>2</sub>-C<sub>6</sub>H<sub>5</sub> or NR''R''' wherein R'' and R''' independently of one another may denote a hydrogen atom or an alkyl, aryl or arylalkyl group, where R'' and R''' may constitute, together with the nitrogen atom, a 5- or 6-membered heterocycle possibly having a second heteroatom selected from among O, S and N, and

- R denotes a hydrogen atom or a group of formula II

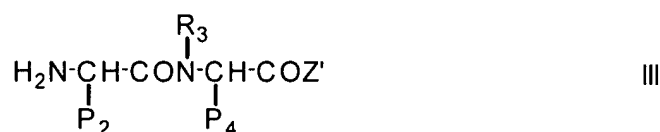


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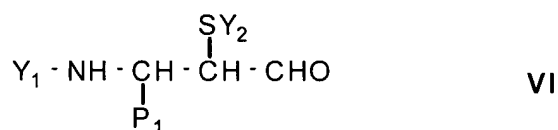
corresponding to the symmetric disulphide of the inhibitor wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, X and Z are as hereinbefore defined,

which involves at least :

- condensing a compound of general formula III



wherein Z' denotes an OC(CH<sub>3</sub>)<sub>3</sub>, OCH<sub>2</sub>-C<sub>6</sub>H<sub>5</sub> or NR''R''' group with R'' and R''' independently of one another may denoting a hydrogen atom or an alkyl, aryl or arylalkyl group, where R'' and R''' may, together with the nitrogen atom, constitute a 5- or 6-membered heterocycle possibly having a second heteroatom selected from among O, S and N, with a compound of general formula VI,



wherein :

- Y<sub>1</sub> denotes a protecting group
- Y<sub>2</sub> denotes a protecting group and
- P<sub>1</sub> denotes a protected form of R<sub>1</sub>,